c/c
Washington.
Seattle.
Juneau.

Scoter.

Winn. Fenno.

DEPARTMENT OF COMMERCE

BUREAU OF FISHERIES 832 Exchange Building: ALASKA TRI 1932

Seattle, Wash; April 15, 1932.

Commissioner of Fisheries, Washington, D. C:

Dear Sir:--

There is inclosed, herewith, a supplement of The Bristol Bay Operations, as requested in office letter to Mr. Winn, dated March twenty sixth, file seventeen.

I trust this will give the required detail concerning the red salmon run in each of the streams of The Bristol Bay District.

Respectfully submitted,

Fred R. Lucas,

Warden:

FL:BJ

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Washington. Seattle.

Juneau.

Scoter.

Winn.

Fenno.

DEPARTMENT OF COMMERCE

BUREAU OF FISHERIES 832 Exchange Building:

> Seattle, Wash: April 15, 1932.

Subject: -- Supplement to The Bristol Bay Annual Report for the year, 1932, page 4, "Salmon Run."

Kvichak-Naknek Rivers:--

These two rivers have to be grouped together because the bays are so close together that the runs coming in cannot be distinguished.

As usual there was a small run ascended the stream, about the twentieth of June, before the fishing season opened. The first red salmon were observed on the upper river on June fifteenth and several small schools were seen around the twentieth. Just before the season opened, June twenty fifth, a good run struck in, most of them getting past before the season opened. By June twenty seventh, when the weekly closed season began, the run had dropped off again. A large run started the first days of July and continued strong until July tenth, when they gradually tapered off to the end of the season.

Ugashik River:--

There were very few fish at the beginning of the fishing season, June twenty fifth. On the twenty eighth a good run struck in and from then on until the fifteenth of July the run continued strong, with the peak about July fourth to tenth. An exceptionally good run for this river.

Egegik River:--

Fish struck in on July third and continued strong, reaching a peak July fifth to eighth and slacking off very noticeably during the week end closed period of July twelfth. Fish started coming in strongly again on the evening flood of July fourteenth and gradually tapered off toward the end of the season.

Nushagak River:--

The following is quoted from one of Warden Fenno's reports; "The red salmon season started off very slack and continued the same till Friday evening July third, when a fair run of salmon came into the river. The run continued over Saturday and Sunday with a fair showing Monday. The run, from July sixth, continued to gradually slacken, in fact with the exception of the two days there was no run of red salmon."

Patrol Boat No. 7 - Bertel Johnson, Capt., Donald S. Praeger, Engineer tended Kvichak and Naknek weirs and patrolled some in Kvichak Bay. No. 7 ran a total of over 500 hours during the season. This would be equivalent to 4,000 miles provided no towing had been done and without tide either way.

Patrol Boat No. 8 - Henry McFadden, Capt., Stanley C. Tholo, Engineer tended the Uhashik weir and patrolled Ugashik Bay.

Patrol Boat No. 9 - Alf Christensen, Capt., Oscar Thorene, Engineer - patrolled Kvichak Bay.

SALMON RUN AND PACK: There was a good run of red salmon in Bristol Bay. especially on the south side from Ugashik to the Kvichak River. The escapement in the Egegik, Naknek and Kvichak Rivers was far above the average. The Ugashik escapement where there was only one cannery, operating, was exceptionally good. The run in the Mushagak River was not so good as on the south side of Bristol Bay and the canneries did not put as much of a pack proportionately but there seems to be a fairly good escapement. The bulk of the run struck in on July 4, right at the beginning of a weekly closed period.

The total pack in the Kvichak-Naknek District in cases amounted to 707,667 red salmon, 385 kings, 29,975 chums and 5,978 red salmon tails. In addition there were 1,350 barrels of mild cured red salmon.

The total Nushagak River cannery pack is as follows: 167,995 reds, 8,434 kings, 27,526 chums and 84 cohos.

The Egegik pack ran 96,245 reds, 44 kings, 1,927 chums and 217 red salmon tails and 600 barrels of mild cured reds.

The Ugashik pack was 51.141 reds, 5 kings and 924 chums.

The Bristol Bay District total is 1,023,048 red salmon, 8,868 kings, 60,350 chums, 84 cohos and 6,195 red salmon tails and in addition 1,950 barrels of mild cured salmon.

There were 1,059 gill net boats and two men each operated in the district. Each boat used nearly 150 fathoms of gill net. Of these boats 248 were operated by local residents selling their catch to the canneries. Of the local residents led were natives. There were also 188 stake nets operated by local residents. 119 122 were natives Each boat and nearly all stake nets required two men to operate them.

only 25 in western alaska (including 1 at Port Moller of 1 at Herendeen Bay There were 28 canneries operated in the district including one floater. There were also three small salteries operated. There is a table attached to 2 this report showing the pack by species for each cannery and saltery in the district. are always

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counted as 1 KVICHAK WEIR: On the evening of June 4, the crew and material for the Kvichak weir left the Marine Ways. There were 21 men including the crews of the four small patrol boats and Warden Lucas. Patrol Boats Nos. 1, 6, 7 and 8 were taken along to tow the material and supplies up the river. There were two

large fish scows, borrowed from the Pacific American Fisheries Cannery, loaded with lumber and other supplies, the pile driver scow, two potscows, a power skiff and two other skiffs. The "Scoter" towed the cannery scows as far as Carlisle, one of them on June 5, and the other one on June 9. Carlisle is 12 miles above Koggiung and as far as the "Scoter" can go up river. It is about 38 miles from Carlisle to the old weir site and approximately 10 miles from the old weir site to the new weir site. This distance has never been surveyed that I know of and the mileage given is estimated from the running time of several boats making many trips. The last 10 miles is through the Kaskanat Flats where the river spreads out around many islands and is shallow and often swift. From Carlisle the 4 small patrol boats towed the cannery lighters and the piledriver one at a time to the old weir site, The piledriver scow is small enough so that it could be towed the rest of the way through the flats, but the loads on the cannery scows had to be transferred to small potscows. Boats Nos. 7 and 8 could make one round trip a day with a potscow each. The last of the material reached the weir on June 25. As this was the opening day of the fishing season it was too late to put in the weir for this year's census. However, it was decided to put in part of it to see how it would hold as the water is swift and the gravel rather loose. There are two islands at this site dividing the river into three channels total ing 1700 feet of weir. The middle channel is swiftest and deepest being 9 feet deep in one place and running nearly 5 miles per hour in the middle. All of the horses were built and the weir was constructed across this middle channel. It washed some but can be made to hold, but it is slow and difficult work. It will be comparatively easy to construct wooden racks across the two side channels.

I would recommend that the electric weir be used across this middle channel just using it as a shear to divert the fish to the two side streams. All the machinery and nearly all the material for this type of weir is already at the Marine Ways as it was used for a weir in 1930. At the new location the electric screen can be built across the middle channel at the lower ends of the islands and the wooden racks built across the side channels at the upper ends of the islands, making the latter nearly half a mile above the electric weir. In 1930 the electric screen held the fish back well enough but they could not be induced to go through the counting gates which were in short wooden weirs at each side of the electric screen. These wood racks dammed the water up causing it to practically all run through the center electricaffied sector where there was no obstruction. At the new location the electric weir being built at the lower ends of the islands should shear the fish to each side into separate and independent channels with a rack across the upper end.

The material on the Kvichak was sorted and neatly stacked on the bank so it would be available immediately the crew reached there next spring. The crew left the Kvichak towing the piledriver and potscows down on July 28.

EGEGIK WEIR: It is intended to build a weir of wooden construction across the Egegik River the coming season. With this intention in mind the material was purchased this year not only for the weir, but also a house 14x30 feet for living quarters for the crew. This material and a crew in charge of Wm. E. Sullivan left the Marine Ways in tow of the "Scoter" and Patrol Boat No. 7 on July 30. The cannery scow with the material aboard was taken up the Egegik River as far as Ericson's place by No. 7 on July 31. It was unloaded on the

bank here as the transportation the remainder of the distance will have to be by potscow and small power dory of small draft, to the weir site near the foot of the rapids. About half of the material had been transported to the weir site when the crew had to be taken off on August 18, to finish the work at the Marine Ways before sailing time.

COMMISSIONER'S VISIT: Commissioner O'Malley reached Bristol Bay on the "Penguin" July 11. The Commissioner and party accompanied by Agent Dennis Winn made an inspection trip to the Naknek weir the following day returning to the bay in the evening and the following day made a survey of conditions in general in the Kvichak-Naknek area sailing again on the morning of the 14.

<u>VIOLATIONS</u>: One fishing boat was caught violating the law and a conviction was secured. The Bureau's boats were patrolling constantly and infractions of the regulations have been very few in the past two years.

NATIVE CONDITIONS: Owing to a good fish run the general economic condition of the natives in this district is as good as it ever is with them. Practically every family that had one or more members fishing commercially on the bay. All the fish drying racks noticed by the writer were full of fish by fall, thus insuring the main article of diet for men and the necessary dog teams.

FINISH OF WORK AND RE-ASSEMBLING OF CREWS AT BASE CAMP: The Egegik crew returned to the Marine Ways on August 17. The Naknek and Ugashik crews arrived on August 21. The engines of Patrol Boats Nos. 7, 8 and 2 were removed, crated and prepared for shipment to Seattle for major repairs. The 4 horsepower engines from two power skiffs were also taken out and shipped for repairs. The floating equipment was pulled out on the ways and the latter taken up as far as the high water mark and stored for the winter.

CREW TRANSPORTATION SOUTHBOUND: Seven men were sent out on the "Victoria" to Seattle leaving Bristol Bay the latter part of July. Six men left on the "Scoter" and seventeen on the "Crane". The latter two boats left the Bay on August 28. The men on the "Crane" were taken through to Seattle with the exception of one left at Seward and one at Wrangell. The men taken on the "Scoter" were transferred to a commercial steamer at Ketchikan and the "Scoter" went on stream patrol in southeastern Alaska.

INJURIES: On June 9, George I. Adams received an accidental cut with a knife and was in the Koggiung hospital for 10 days. On August 25, the writer fell and fractured the left shoulder blade. All the doctors had left the Bay. Was transported on a plane to the government hospital at Anchorage, Alaska, where I was confined until September 18.

RECOMMENDATIONS: A bunk scow is badly needed for the Kvichak weir crew. There is no suitable building site near the weir for a permanent building. A light scow about 13x55 feet with living quarters 15x40 feet built on it, would be much more convenient than a house as the crew could be established on it for the long trip from the Marine Ways to the weir in the spring and again returning in the fall. The scow could be moored to a dolphin close to the work and there would not be the necessity of making and breaking camp each year. The scow could be lightly constructed as it would never be beached with a heavy load as a fish scow is.

A new marine ways will soon be a necessity. The one we have is not large enough to accommodate our equipment. One scow is on a gridiron where it cannot be moved until it floats on one or two exceptionally high tides each year. The stringers of the present ways are so soft that the steel sinks into them. The foundation piling that never were driven solid have nearly all come out as far up as the tide reaches. This makes it necessary to put in temporary blocking each year which is hard to hold in the soft mud. The steam boiler and winch should also be moved 50 yards or so farther back on the hillside out of reach of high tides.

WINTER MEN: Warden Eric D. Fenno remained in the Nushagak district for the winter to supervise the destruction of trout and the payment of territorial bounties for them. Wm. E. Sullivan remained on Becharoff Lake and C. M. Hatton on Iliamma Lake in the same capacity. Alf Christensen remained at the Marine Ways as winter watchman of the Bureau's floating equipment and buildings there.

Respectfully submitted,

Warden Alaska Service.